

tions that may be executed by processor 22. Memory 14 may be one or more memories and of any type suitable to the local application environment, and may be implemented using any suitable volatile or nonvolatile data storage technology such as a semiconductor-based memory device, a magnetic memory device and system, an optical memory device and system, fixed memory, and removable memory. For example, memory 14 can be comprised of any combination of random access memory (“RAM”), read only memory (“ROM”), static storage such as a magnetic or optical disk, or any other type of non-transitory machine or computer readable media. The instructions stored in memory 14 may include program instructions or computer program code that, when executed by processor 22, enable the apparatus 10 to perform tasks as described herein.

[0052] Apparatus 10 may also include one or more antennas (not shown) for transmitting and receiving signals and/or data to and from apparatus 10. Apparatus 10 may further include a transceiver 28 that modulates information on to a carrier waveform for transmission by the antenna(s) and demodulates information received via the antenna(s) for further processing by other elements of apparatus 10. In other embodiments, transceiver 28 may be capable of transmitting and receiving signals or data directly.

[0053] Processor 22 may perform functions associated with the operation of apparatus 10 including, without limitation, precoding of antenna gain/phase parameters, encoding and decoding of individual bits forming a communication message, formatting of information, and overall control of the apparatus 10, including processes related to management of communication resources.

[0054] In an embodiment, memory 14 stores software modules that provide functionality when executed by processor 22. The modules may include an operating system 15 that provides operating system functionality for apparatus 10. The memory may also store one or more functional modules 18, such as an application or program, to provide additional functionality for apparatus 10. The components of apparatus 10 may be implemented in hardware, or as any suitable combination of hardware and software.

[0055] As mentioned above, apparatus 10 may be a server. In this embodiment, apparatus 10 may be controlled by memory 14 and processor 22 to define mappings between coordinates of interest and fake location areas. Apparatus 10 may be further controlled by memory 14 and processor 22 to provide an application to a terminal. Apparatus 10 may be further controlled by memory 14 and processor 22 to distribute mappings to the terminal. Apparatus 10 may be further controlled by memory 14 and processor 22 to receive a location update generated from the terminal. In this example, the location update may be based upon a fake location area. In one embodiment, apparatus 10 is further controlled by memory 14 and processor 22 to determine location information of the terminal based upon the location update.

[0056] According to another embodiment, apparatus 10 may be a terminal. In this embodiment, apparatus 10 may be controlled by memory 14 and processor 22 to receive an application. Apparatus 10 may be further controlled by memory 14 and processor 22 to receive mappings between coordinates of interest and fake location areas. Apparatus 10 may then be further controlled by memory 14 and processor 22 to generate a location update. In this example, the location update may be based upon a fake location area.

[0057] The described features, advantages, and characteristics of the invention may be combined in any suitable manner in one or more embodiments. One skilled in the relevant art will recognize that the invention may be practiced without one or more of the specific features or advantages of a particular embodiment. In other instances, additional features and advantages may be recognized in certain embodiments that may not be present in all embodiments of the invention.

[0058] One having ordinary skill in the art will readily understand that the invention as discussed above may be practiced with steps in a different order, and/or with hardware elements in configurations which are different than those which are disclosed. Therefore, although the invention has been described based upon these preferred embodiments, it would be apparent to those of skill in the art that certain modifications, variations, and alternative constructions would be apparent, while remaining within the spirit and scope of the invention.

1. A method, comprising:
 - defining mappings between coordinates of interest and fake location areas;
 - providing an application to a terminal;
 - distributing the mappings to the terminal;
 - receiving a location update generated from the terminal, wherein the location update is based upon a fake location area;
 - and determining location information of the terminal based upon the location update.
2. The method according to claim 1, wherein the distributing of mappings to the terminal erases information from the terminal.
3. The method according to claim 1 or 2, wherein the determining of location information of the terminal includes creating an inverse mapping.
4. The method according to claim 1, wherein providing the application to the terminal is performed by remote provisioning.
5. An apparatus, comprising:
 - at least one processor; and
 - at least one memory including computer program code, the at least one memory and the computer program code configured, with the at least one processor, to cause the apparatus at least to
 - define mappings between coordinates of interest and fake location areas;
 - provide an application to a terminal;
 - distribute the mappings to the terminal;
 - receive a location update generated from the terminal, wherein the location update is based upon a fake location area;
 - and determine location information of the terminal based upon the location update.
6. The apparatus according to claim 5, wherein the distributing of mappings to the terminal erases information from the terminal.
7. The apparatus according to claim 5, wherein the determining of location information of the terminal creates an inverse mapping.
8. The apparatus according to claim 5, wherein providing the application to the terminal is performed by remote provisioning.
9. A computer program, embodied on a computer readable medium, the computer program configured to control a processor to perform a process, comprising: